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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,596	04/24/2006	Haruhiko Naruse	P29182	2367
7055 7590 08/13/2009 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				
EXAMINER DOAN, ROBYN KIEU				
ART UNIT 3732		PAPER NUMBER		
NOTIFICATION DATE 08/13/2009		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

### Office Action Summary

**Application No.**

10/565,596

**Applicant(s)**

NARUSE, HARUHIKO

**Examiner**

Robyn Doan

**Art Unit**

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 8, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al (US Pub. # 20040079384) in view of Poulos et al (USP 5,279,314).

Lai et al discloses an electric dental flosser (fig. 11) comprising a drive shaft (921), a drive mechanism (923) operable to rotationally oscillate the drive shaft about its own axis (paragraph 55), a floss holder (910) mounted on the drive shaft, the floss holder having a forked floss holding portion (see fig. 1) with a proximal end and an opposite distal end portions, a flosser element (210, fig. 1) stretched taut the opposite distal end portions of the floss holding portion. Lai et al fails to show the flosser element being held in a direction perpendicular to an axial direction of the drive shaft so as to pass across an extension line of the drive shaft and an intermediate portion of a line connecting an intermediate portion of the flosser element and the proximal end portion being positioned on an extension line of the drive shaft, wherein the floss holding portion being inclined such that the flosser element stretched on the floss holding portion being positioned on a further distal end side beyond a distal end of the neck portion in an axial direction of the drive shaft. Poulos et al discloses an electric dental flosser (figs. 2-4) comprising a drive shaft (100), a drive mechanism (70), a floss holder

(120) mounted on the drive shaft, the floss holder having a forked floss holding portion (see fig. 2) with a proximal end and an opposite distal end portions, a flosser element (string of dental floss) stretched taut the opposite distal end portions of the floss holding portion being held in a direction perpendicular to an axial direction of the drive shaft so as to pass across an extension line of the drive shaft (see fig. 6 and figs. 25, 26, Applicant is noted that the floss strand 126 in fig. 25 can be moved to any notch portions 122 of fig. 26, therefore, the floss strand inherently held in a direction perpendicular to an axial direction of the drive shaft so as to cross an extension line of the drive shaft); wherein an intermediate portion of a line connecting an intermediate portion of the flosser element and the proximal end portion (127) being positioned on an extension line (107) of the drive shaft; the floss holder further having a neck (60) mounted on the drive shaft via (67, 108) and the floss holding portion mounted on the neck via (92, 94, 95) and wherein the floss holding portion being inclined (see fig. 6) such that the flosser element stretched on the floss holding portion being positioned on a further distal end side beyond a distal end of the neck portion in an axial direction of the drive shaft (see fig. 4). It would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the flosser of Lai et al with the position of the floss vs. the drive shaft as taught by Poulos et al as an alternative way of cleaning the teeth of the user.

Claims 4-7, 9, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al in view of Poulos et al and further in view of Imai et al (USP 5,170,809).

In regard to claims 4, 7, 9, 11, 14 and 16, Lai et al in view of Poulos et al discloses the essential claimed invention except for the floss holder having a floss holding portion and a neck portion, wherein the neck and the floss holding portion are formed independently and the floss holding portion having a plurality of flosser elements being stretched taut on the floss holder. Imai et al discloses an electric dental floss holder (figs. 2, 3, 12) comprising a floss holder (fig. 3) having a neck portion (72) mounted on a drive shaft (40), a floss holding portion (76) mounted on the neck portion, wherein the neck and the floss holding portion being formed independently (see fig. 3), the floss holding portion having a plurality of flosser elements (71E) being stretched taut on the floss holder. It would have been obvious to one having an ordinary skill in the art at the time the invention was made to modify the floss holder of Lai et al in view of Poulos et al with the floss holder as taught by Imai et al in order to easily place the flosser elements. In regard to claims 5, 12, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to employ the floss holding portion with a biodegradable plastic material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. In regard to claims 6, 13, Imai et al further shows the floss holder having a U-shape with opposite distal end surfaces (fig. 12), an outer side surface and a floss guide groove (86E) defined in the distal end surfaces and wherein a length of floss (71E) being wound around the floss holding portion while received in the floss guide groove. It would have been obvious to one having an ordinary skill in the art at the time the invention

was made to modify the floss holder of Lai et al in view of Poulos et al with the floss holder as taught by Imai et al in order to better secure the flosser element to the floss holder.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lai et al in view of Poulos et al and further in view of Stern (USP 6,138,689).

Lai et al in view of Poulos et al discloses the essential claimed invention except for the floss holder having an elastically deformable neck portion. Stern discloses a floss holder (fig. 1A) comprising a floss holder (13) having an elastically deformable neck portion (37). It would have been obvious to one having an ordinary skill in the art at the time the invention was made to employ the neck portion as taught by Stern into the device of Lai et al in view of Poulos et al in for the intended use purpose.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robyn Doan whose telephone number is (571) 272-4711. The examiner can normally be reached on Mon-Fri 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robyn Doan/  
Primary Examiner, Art Unit 3732